

Trend Study 4-4-01

Study site name: Owen's Canyon.

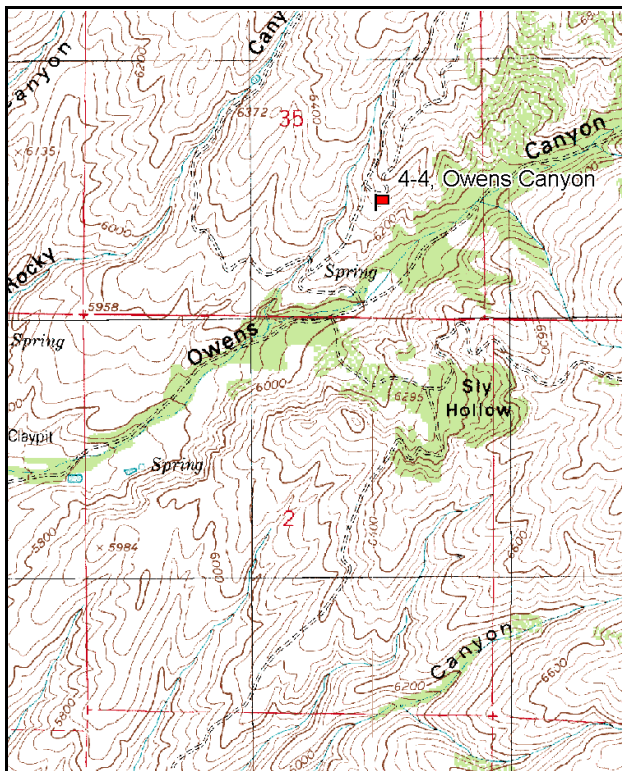
Vegetation type: Burned and Seeded.

Compass bearing: frequency baseline 160 degrees magnetic.

Frequency belt placement: Line 1 (11 & 71ft), line 2 (59ft), line 3 (34ft), line 4 (95ft).

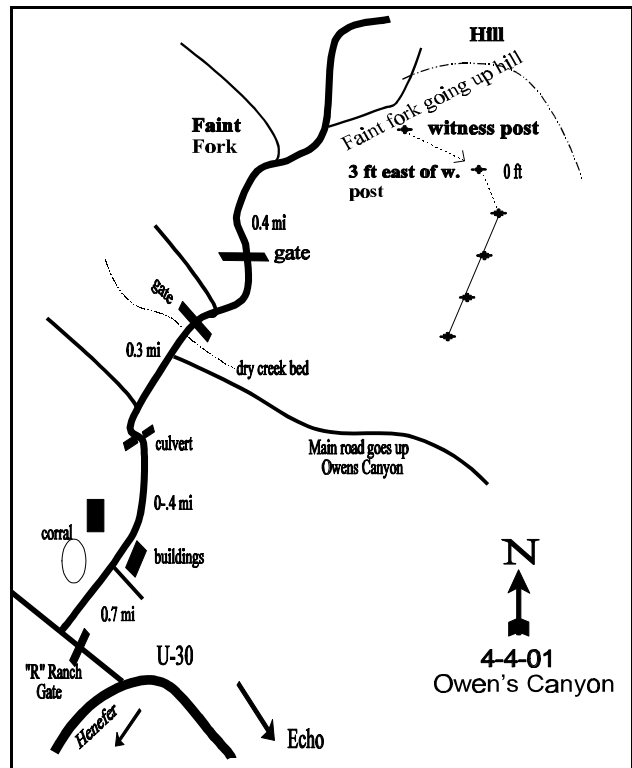
LOCATION DESCRIPTION

From the "R" Ranch main gate (contact Tiny Wostinhume for key or access through Tank Canyon), proceed 0.7 miles to the ranch buildings and a road to the right. Continue straight 0.4 miles to a culvert, then 0.45 miles further to a DWR gate. Continue through the gate 0.25 miles, turn left, cross the wash, stay on main road (left fork leads to DWR cabin). Proceed 0.4 miles to a fork in the road. Continue right for 0.3 miles. A witness post is three feet from the 0-foot stake. The 0-foot baseline stake is marked by browse tag #7945. The baseline doglegs after the 100-foot baseline stake and runs 214 degrees magnetic.



Map Name: Henefer

Township 4N, Range 4E, Section 35



Diagrammatic Sketch

UTM 4542410 N 461470 E

DISCUSSION

Trend Study No. 4-4

The Owen's Canyon study samples a mountain big sagebrush/grass type on a steep (30%) southwest slope at 6,200 feet in elevation. Located on Division of Wildlife Resources property on the north side of Owen's Canyon, this area in the past was considered an important winter range for deer. Elk make light use of the area during exceptionally heavy winters. Deer pellet groups were moderately abundant during the 1984 reading. Forage utilization was not exceptionally heavy. However, due to deep crusted snow in 1983-84, it prevented normal use patterns. During the 1996 reading, few deer and elk pellet groups were encountered. Some cattle also grazed the area in 1996. A fire burned the entire area prior to the 2001 reading. A pellet group transect read on the site in 2001, estimated 9 elk and 4 deer days use/acre (23 edu/ha and 10 ddu/ha).

The soil is moderately shallow and gravelly or cobbly. Effective rooting depth is estimated at only about 10 inches. It has a relatively high soil temperature of 66°F at just over 9 inches in depth. Soil texture is a clay loam with a neutral soil reaction (pH of 6.7). Drainage is probably excessive and soil moisture may be limiting in the upper horizons during midsummer. Big sagebrush and other deep rooted shrubs do well on the site indicating that rooting depth is generally not limiting for these species. This soil appears to have a high erosion potential. However, a moderate cover of shrub crowns, perennial grasses, annual grasses, and litter is effective in preventing most soil loss. After the fire, the abundant herbaceous cover appears adequate for protecting the soil from erosion. The erosion condition class for the site was determined as stable.

Prior to the burn, the browse composition consisted chiefly of mountain big sagebrush which accounted for 91% of the browse cover in 1996. Some of the sagebrush found on the site had growth form characteristics of basin big sagebrush (*Artemisia tridentata tridentata*). This would indicate some hybridization with mountain big sagebrush (*A. tridentata vaseyana*). Population density had remained fairly constant since 1984, ranging from 3,966 plants/acre in 1990 to 3,420 in 1996. In 1996, the population was mostly mature (69%), lightly to moderately hedged, in good vigor, with a low percent decadency (22%). Heavy utilization peaked in 1990, when 20% of the population displayed a heavily hedged growth form. Percent decadency also peaked that year at 43%. Dead plants, first sampled in 1996, were abundant at 1,180 plants/acre. This would suggest that many of the decadent plants sampled in 1990 died and were being replaced by young plants.

The fire which burned the site prior to the 2001 reading eliminated nearly all of the shrubs. The only browse found on the site in 2001 included a few sagebrush seedlings and young, some resprouting stickyleaf low rabbitbrush, and seeded prostate Kochia. Kochia currently ('01) numbers 1,460 plants/acre. Most of the population (71%) consists of small young plants.

Herbaceous composition primarily consists of grasses. Cheatgrass and Japanese brome were common and accounted for 63% of the total grass cover in 1996. After the burn, cheatgrass and Japanese brome provide only 9% of the grass cover. The most important herbaceous plants are exotic perennial grasses, crested and intermediate wheatgrass and smooth brome. Several other native perennial grasses are found on the site but only western wheatgrass is abundant. Forbs consist primarily of weedy biennials and annuals. The only common perennial forbs consist of northern sweet vetch and American vetch.

1984 APPARENT TREND ASSESSMENT

Although soil movement is detectable, it is not serious. A vigorous grass and shrub cover in combination with gentle to moderate slope helps maintain a stable trend. Vegetative trend also appears stable in spite of a somewhat exotic plant composition, where the understory is primarily seeded grasses. The key species is vigorous and should maintain itself.

1990 TREND ASSESSMENT

The sagebrush population on this important winter range appears to be stable. The only indication of downward trend is the increase in percent decadency, from 17% to 43%. The number of decadent plants are matched by the numbers of seedling and young age class plants, although there are some indications of a downward trend. While the mature sagebrush have good vigor, the decadent plants display poor growth and vigor. Twenty-one percent of the available sagebrush have a heavily hedged growth form. Sagebrush canopy cover is estimated at 18%. Seedling sagebrush are common, but many are suffering from drought and competition with the dense understory of cheatgrass. Broom snakeweed is uncommon, and has actually decreased. Crested wheatgrass shows a significant increase in sum of nested frequency. There is an adequate amount of litter cover with no evidence of erosion.

TREND ASSESSMENT

soil - stable (3)

browse - stable (3)

herbaceous understory - up slightly (4)

1996 TREND ASSESSMENT

The soil trend is up slightly due to a decline in bare ground and an increase in litter cover. Unfortunately these improvements come from a dense stand of annual grasses. Trend for browse is stable. It's density has declined slightly but heavy use and percent decadence have declined and vigor has improved. Seedlings and young are not abundant and likely have a difficult time competing with the extremely high densities of winter annuals. Trend for the herbaceous understory is up, slightly due to a slight increase in the sum of nested frequency for perennial grasses and forbs.

TREND ASSESSMENT

soil - up slightly (4)

browse - stable (3)

herbaceous understory - up slightly, but still dominated by annuals (4)

2001 TREND ASSESSMENT

Trend for soil is down slightly due to an increase in percent bare ground and a 52% decline in litter cover. However, herbaceous cover is still abundant. The erosion condition class was determined as stable in 2001. Trend for browse is down due to loss of nearly all browse to fire. The site currently supports a few seedling and young sagebrush, resprouting stickyleaf low rabbit brush, and seeded prostate kochia. Trend for the herbaceous understory is up slightly due to an increase in the sum of nested frequency for perennial grasses and a significant decline in the nested frequency of cheatgrass and Japanese brome. Sum of nested frequency for perennial forbs has remained stable but frequency of annual forbs has increased three-fold.

TREND ASSESSMENT

soil - down slightly (2)

browse - down, lost to fire (1)

herbaceous understory - slightly up (4)

HERBACEOUS TRENDS --

Herd unit 04 , Study no: 4

T y p e	Species	Nested Frequency				Quadrat Frequency				Average Cover %	
		'84	'90	'96	'01	'84	'90	'96	'01	'96	'01
G	Agropyron cristatum	_a 70	_b 132	_b 133	_a 87	34	49	46	37	6.62	5.27
G	Agropyron intermedium	_a 1	_a 8	_a 15	_b 55	1	3	5	21	.69	3.37
G	Agropyron smithii	_a -	_a -	_b 29	_b 45	-	-	10	14	.39	4.52
G	Agropyron spicatum	3	-	2	-	1	-	2	-	.01	-
G	Bromus inermis	_a 50	_{ab} 83	_b 99	_b 105	20	26	34	33	3.80	9.85
G	Bromus japonicus (a)	-	-	_b 203	_a 73	-	-	65	30	4.48	.50
G	Bromus tectorum (a)	-	-	_b 321	_a 84	-	-	87	34	15.25	1.99
G	Dactylis glomerata	_a -	_a -	_a -	_b 21	-	-	-	10	-	.35
G	Oryzopsis hymenoides	-	2	4	10	-	1	1	4	.03	.36
G	Poa bulbosa	_a -	_a -	_a 2	_b 26	-	-	2	9	.01	1.43
G	Poa fendleriana	-	-	-	4	-	-	-	1	-	.15
G	Poa pratensis	-	2	5	8	-	1	3	3	.09	.18
G	Poa secunda	-	1	2	-	-	1	1	-	.03	-
G	Sitanion hystrix	_b 9	_{ab} 2	_a -	_a -	6	1	-	-	-	-
Total for Annual Grasses		0	0	524	157	0	0	152	64	19.74	2.50
Total for Perennial Grasses		133	230	291	361	62	82	104	132	11.68	25.51
Total for Grasses		133	230	815	518	62	82	256	196	31.43	28.01
F	Agoseris glauca	-	-	-	3	-	-	-	1	-	.00
F	Alyssum alyssoides (a)	-	-	_a 157	_b 324	-	-	58	96	.81	25.80
F	Allium spp.	_a -	_a -	_a -	_b 32	-	-	-	15	-	.20
F	Ambrosia psilostachya	-	-	-	7	-	-	-	3	-	.04
F	Arabis spp.	_{ab} 2	_b 13	_{ab} 2	_a -	1	5	2	-	.01	-
F	Aster spp.	-	-	4	7	-	-	1	2	.03	.18
F	Astragalus spp.	-	-	2	1	-	-	1	1	.03	.03
F	Camelina microcarpa (a)	-	-	_a 4	_b 23	-	-	1	8	.38	.06
F	Carduus nutans (a)	-	-	-	-	-	-	-	-	-	.03
F	Calochortus nuttallii	-	-	-	3	-	-	-	1	-	.00
F	Cirsium undulatum	-	2	8	5	-	2	3	2	.06	.01
F	Collomia linearis (a)	-	-	_a -	_b 14	-	-	-	5	-	.02
F	Collinsia parviflora (a)	-	-	_a 3	_b 45	-	-	1	14	.00	.68
F	Cymopterus spp.	-	-	1	-	-	-	1	-	.00	-
F	Descurainia pinnata (a)	-	-	-	10	-	-	-	4	-	.04
F	Draba spp. (a)	-	-	_a -	_b 18	-	-	-	8	-	.04
F	Epilobium brachycarpum (a)	-	-	_a -	_b 39	-	-	-	12	-	.75

T y p e	Species	Nested Frequency				Quadrat Frequency				Average Cover %	
		'84	'90	'96	'01	'84	'90	'96	'01	'96	'01
F	<i>Erodium cicutarium</i> (a)	-	-	a ⁻	b ⁷⁰	-	-	-	21	-	3.65
F	<i>Erigeron strigosus</i>	-	-	5	-	-	-	2	-	.03	-
F	<i>Grindelia squarrosa</i>	8	-	-	3	3	-	-	2	-	.03
F	<i>Hedysarum boreale</i>	a ⁻	a ⁻	b ⁴⁰	a ⁻	-	-	19	-	.42	-
F	<i>Holosteum umbellatum</i> (a)	-	-	a ³¹	b ⁶⁹	-	-	11	26	.36	.43
F	<i>Lactuca serriola</i>	a ⁻	a ⁻	a ⁻	b ¹⁷	-	-	-	8	-	.06
F	<i>Machaeranthera</i> spp	-	-	6	-	-	-	3	-	.01	-
F	<i>Melilotus officinalis</i>	-	-	-	5	-	-	-	2	-	.18
F	<i>Microsteris gracilis</i> (a)	-	-	a ⁻	b ¹²	-	-	-	7	-	.08
F	<i>Oenothera caespitosa</i>	3	-	-	-	1	-	-	-	-	-
F	<i>Penstemon</i> spp.	-	-	-	1	-	-	-	1	-	.03
F	<i>Phlox longifolia</i>	a ⁻	a ⁻	a ⁻	b ¹⁴	-	-	-	5	-	.36
F	<i>Polygonum douglasii</i> (a)	-	-	3	3	-	-	1	2	.00	.01
F	<i>Ranunculus testiculatus</i> (a)	-	-	a ³	b ⁸	-	-	1	4	.00	.04
F	<i>Sanguisorba minor</i>	a ⁻	a ⁻	a ⁻	b ⁷	-	-	-	5	-	.66
F	<i>Sisymbrium altissimum</i> (a)	-	-	a ⁻	b ²⁵	-	-	-	10	-	.21
F	<i>Sphaeralcea coccinea</i>	-	-	-	4	-	-	-	2	-	.21
F	<i>Tragopogon dubius</i>	a ⁶	a ⁶	c ²⁰	ab ¹²	2	3	12	6	.16	.10
F	<i>Vicia americana</i>	a ⁻	a ⁴	c ⁶¹	b ²⁹	-	3	28	13	.36	.26
Total for Annual Forbs		0	0	201	660	0	0	73	217	1.57	31.87
Total for Perennial Forbs		19	25	149	150	7	13	72	69	1.14	2.39
Total for Forbs		19	25	350	810	7	13	145	286	2.72	34.26

Values with different subscript letters are significantly different at alpha = 0.10 (annuals excluded)

BROWSE TRENDS --

Herd unit 04 , Study no: 4

T y p e	Species	Strip Frequency		Average Cover %	
		'96	'01	'96	'01
B	Amelanchier alnifolia	3	0	-	-
B	Artemisia tridentata vaseyana	82	3	19.85	-
B	Chrysothamnus nauseosus albicaulis	7	0	.83	-
B	Chrysothamnus viscidiflorus viscidiflorus	16	16	.97	.36
B	Gutierrezia sarothrae	1	1	.07	-
B	Kochia prostrata	0	37	-	.35
B	Symphoricarpos oreophilus	1	0	-	-
Total for Browse		110	57	21.72	0.70

BASIC COVER --

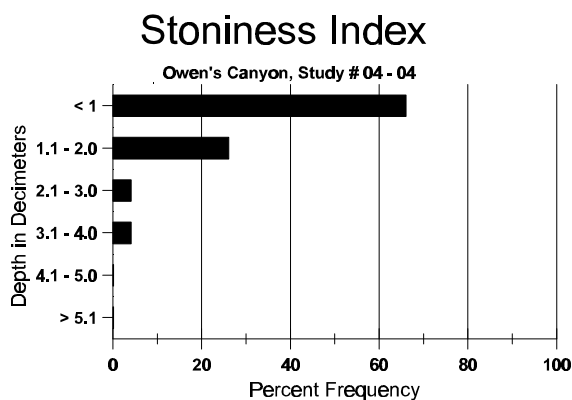
Herd unit 04 , Study no: 4

Cover Type	Nested Frequency		Average Cover %			
	'96	'01	'84	'90	'96	'01
Vegetation	396	392	.75	8.50	50.47	63.19
Rock	131	176	0	7.00	2.49	4.01
Pavement	120	267	25.50	11.75	2.90	5.78
Litter	400	367	0	61.50	68.31	32.54
Cryptogams	37	3	2.00	0	.95	.00
Bare Ground	74	283	0	11.25	1.56	15.32

SOIL ANALYSIS DATA --

Herd Unit 04, Study no: 04, Owen's Canyon

Effective rooting depth (in)	Temp °F (depth)	PH	%sand	%silt	%clay	%0M	PPM P	PPM K	dS/m
9.8	66.0 (9.35)	6.7	44.6	27.4	28.0	3.2	22.4	176.0	.4



PELLET GROUP FREQUENCY --

Herd unit 04 , Study no: 4

Type	Quadrat Frequency		Pellet Transect	
	'96	'01	Pellet Groups per Acre	Days Use per Acre (ha)
			'01	'01
Rabbit	1	-	-	-
Elk	4	3	122	9 (23)
Deer	12	3	52	4 (10)
Cattle	1	-	-	-

BROWSE CHARACTERISTICS --

Herd unit 04 , Study no: 4

A Y G R E		Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Amelanchier alnifolia																		
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	-	-	-	1	-	-	-	-	-	1	-	-	-	20			1
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	1	-	-	1	-	-	-	-	-	2	-	-	-	40	25	20	2
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	12	9	0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
		'84			00%			00%			00%							
		'90			00%			00%			00%							
		'96			00%			00%			00%							
		'01			00%			00%			00%							
Total Plants/Acre (excluding Dead & Seedlings)														'84	0	Dec:	-	
														'90	0		-	
														'96	60		-	
														'01	0		-	

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Artemisia tridentata vaseyana																		
S	84	4	-	-	-	-	-	-	-	-	4	-	-	-	133		4	
	90	32	-	-	-	-	-	-	-	-	31	-	-	1	1066		32	
	96	6	-	-	-	-	-	-	-	-	6	-	-	-	120		6	
	01	7	-	-	-	-	-	-	-	-	7	-	-	-	140		7	
Y	84	17	13	-	-	-	-	-	-	-	30	-	-	-	1000		30	
	90	12	10	4	-	-	-	-	-	-	25	-	1	-	866		26	
	96	15	-	-	1	-	-	-	-	-	16	-	-	-	320		16	
	01	3	-	-	-	-	-	-	-	-	2	1	-	-	60		3	
M	84	13	48	8	-	-	-	-	-	-	68	-	1	-	2300	23 32	69	
	90	5	29	8	2	-	-	-	-	-	44	-	-	-	1466	14 17	44	
	96	105	12	1	-	-	-	-	-	-	114	-	3	1	2360	26 45	118	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	- -	0	
D	84	4	11	5	-	-	-	-	-	-	18	-	2	-	666		20	
	90	11	29	12	-	1	-	-	-	-	33	-	4	16	1766		53	
	96	23	11	2	1	-	-	-	-	-	30	-	2	5	740		37	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
X	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	1180		59	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		61%			11%			03%			+ 3%							
'90		56%			20%			17%			-17%							
'96		13%			02%			06%			-98%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	3966	Dec:	17%			
												'90	4098		43%			
												'96	3420		22%			
												'01	60		0%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Chrysothamnus nauseosus albicaulis																		
S	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	1	-	-	-	-	-	-	-	-	-	1	-	-	33		1	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	1	-	-	-	-	-	-	-	-	-	1	-	-	33		1	
	96	1	-	-	-	-	-	-	-	-	-	1	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	84	1	-	-	-	-	-	-	-	-	-	1	-	-	33	9	6	1
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	4	-	-	-	-	-	-	-	-	-	4	-	-	80	24	34	4
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
D	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	2	-	-	-	-	-	-	-	-	-	2	-	-	66		2	
	96	3	-	-	-	-	-	-	-	-	-	3	-	-	60		3	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%			+67%							
'90		00%			00%			00%			+38%							
'96		00%			00%			00%										
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	33	Dec:	0%			
												'90	99		67%			
												'96	160		38%			
												'01	0		0%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Chrysothamnus viscidiflorus viscidiflorus																		
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	90	-	1	-	-	-	-	-	-	-	-	-	1	-	33	6	8	
	96	15	-	-	2	-	-	-	-	-	17	-	-	-	340	14	22	
	01	23	-	-	-	-	-	-	-	-	23	-	-	-	460	11	16	
D	84	1	-	-	-	-	-	-	-	-	1	-	-	-	33		1	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
X	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%			+ 0%							
'90		100%			00%			100%			+92%							
'96		00%			00%			00%			+ 9%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	33	Dec:	100%			
												'90	33		0%			
												'96	420		10%			
												'01	460		0%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Gutierrezia sarothrae																		
S	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	1	-	-	-	-	-	-	-	-	-	1	-	-	33		1	
	96	9	-	-	-	-	-	-	-	-	-	9	-	-	180		9	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	2	-	-	-	-	-	-	-	-	-	2	-	-	40		2	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	84	33	-	-	-	-	-	-	-	-	-	33	-	-	1100	12	6	33
	90	1	-	-	-	-	-	-	-	-	-	1	-	-	33	5	6	1
	96	8	-	-	-	-	-	-	-	-	-	8	-	-	160	10	12	8
	01	1	-	-	-	-	-	-	-	-	-	1	-	-	20	-	-	1
D	84	1	-	-	-	-	-	-	-	-	-	1	-	-	33			1
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
		'84			00%			00%			-97%							
		'90			00%			00%			+84%							
		'96			00%			00%			-90%							
		'01			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	1133	Dec:	3%			
												'90	33		0%			
												'96	200		0%			
												'01	20		0%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Kochia prostrata																		
S	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	01	52	-	-	-	-	-	-	-	-	52	-	-	-	1040		52	
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	01	21	-	-	-	-	-	-	-	-	20	1	-	-	420	4	21	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		00%			00%			00%										
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	-			
												'90	0		-			
												'96	0		-			
												'01	1460		-			
Symphoricarpos oreophilus																		
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
	96	-	-	-	1	-	-	-	-	-	1	-	-	-	20	17	1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		00%			00%			00%										
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	-			
												'90	0		-			
												'96	20		-			
												'01	0		-			